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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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08/936,304 09/24/97 DONG

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EXAMINER

MM91/1106

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ART UNIT

PAPER NUMBER

2881

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11/06/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

08/936,304

Applicant(s)

DONG, DAWEI

Examiner

Leon Scott, Jr.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on RCE filed 4/30/01 and Amend^{ment} E filed 5/.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 6-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

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The amendment filed 9/30/01 is objected to under 35 U.S.C. 132 because it introduces **new matter** into the specification. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention.

Claims 6-13 are rejected under 35 U.S.C. 112, first paragraph as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Since it is not clear what, if anything, has been done with respect to the limitations rejected in claim 6 in the last office action(1/31/01-final rejection); that rejection of claim 6 is, within reason, hereby repeated in its entirety.

There does not appear to be a written description of the claim limitation that the motor is: "**adapted to drive the shaft more than 360 degrees in a single direction**"(see lines 3 and 4 of claim 6). Thus the added material which is not supported by the original disclosure is that the motor is: "**adapted to drive the shaft more than 360 degrees in a single direction**"; accordingly lines 3 and 4 of claim 6 constitute **new matter**.

Applicant stated in his response to the holding of **new matter** in the previous rejection that, "*Since the free wheel 32 is attached to the main shaft 37, the shaft 37 travels many rpm, and clearly more than 360 degrees*". The facts are that this *conclusion* that *the shaft 37 travels many rpm, and clearly more than 360 degrees* constitutes nothing more than an attempt to justify a lack of disclosure. Indeed the plane of laser light generated by the level could readily be achieved by rotating the laser level in 180 degree increments in one direction to produce the plane of light. Of course this is speculation on the part of the examiner, just as applicants position is speculation; however both positions may be viable because nothing has been disclosed which would support applicant's position over that of the examiners. Should applicant care to submit an affidavit attesting to what one of ordinary skill in the art would consider disclosed by the application as *originally filed* the question of support still persists. **Again** applicant is **requested** to point out where in the specification **support** for this exact recitation can be found. It is pointed out that applicant's response to this request(see Amendment D dated 12/22/00) is not convincing of support for this recitation, thus the rejection remains in force.

Further it is pointed out that applicant has not, as of this date responded to the "request " to point out where in the specification **support** for this exact recitation can be found, this being at least the second request, and the limitation still remains in claim 6. Although the examiner *has not held* applicant's amendment to be **non-responsive**, in an attempt to fairly afford applicant every opportunity to support his position **on the record**; applicant is reminded of the requirement to respond to *every ground of rejection*. The rejection of claim 6 remains in force.

In new claim 11, In order for the *laser diode* to be: **rotated in a single movement about a line perpendicular with the shaft until the reference plane is perpendicular**

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with the rotating plane implies that the *motor coupled to rotate the shaft* and thereby the laser diode in the housing extending from the shaft would have to ***drive the shaft more than 360 degrees in a single direction***.

Applicant is advised that it is not clear that: the ***motor coupled to rotate the shaft*** and thereby the ***laser diode in a single movement about a line perpendicular with the shaft until the reference plane is perpendicular with the rotating plane*** can be achieved since the underlying disclosure to support that position ***has not*** been shown to exist. Thus the added material which is not supported by the original disclosure is that the ***"laser diode is rotated in a single movement about a line perpendicular with the shaft until the reference plane is perpendicular with the rotating plane."*** accordingly lines 6-8 of claim 11 constitute ***new matter***. To once again insure that applicant is given due consideration in this regard applicant is ***requested*** to point out where in the specification ***support*** for this ***exact*** recitation can be found.

In new claim 13, There does not appear to be a written description of the claim limitation that the motor is coupled to " ***the shaft being rotated so that the first and second laser diodes produce the level 360 degree reference plane***." (see lines 8 and 9 of claim 13). Thus the added material which is not supported by the original disclosure is that the: " ***the shaft being rotated so that the first and second laser diodes produce the level 360 degree reference plane***."; accordingly lines 8 and 9 of claim 13 constitute ***new matter***.

Applicant is advised that since no disclosure has been shown to exist which supports the position that the ***motor is adapted to drive the shaft more than 360 degrees in a single direction***; thus if the shaft is to be rotated to produce the claimed desired result, the laser diodes would have to be disposed in a position diametrically opposed to each other on opposite sides of the shaft each rotating a minimum of 180 degrees to produce the level 360 degree reference plane. It is not clear that such disclosure of the positioning of the laser diodes and the motor rotating the shaft relative to the diode positions exist. To insure that applicant is given due consideration in this regard applicant is ***requested*** to point out where in the specification ***support*** for this ***exact*** recitation can be found.

Applicant is hereby advised that since claims 7-10 each depend from claim 6, and claim 12 depends from claim 11, these claims (7-10 and 12) are likewise rejected as in the above rejection of claims 6-13 as containing ***new matter*** disclosed in their respective parent claims.

Claims 6-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In the preamble of all of claims 6-10 and 11-13 applicant ***now*** attempts to ***change the scope of his invention*** by inserting the word ***level*** after laser so that all claims are to ***A laser level system***. In response to applicant's arguments, the recitation to: ***A laser level system*** has not been given patentable weight because the recitation occurs in the ***preamble***. Applicant is reminded that, a preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim ***does not*** depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand

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alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951). Further since no connective relationships have been recited in claim 6 between a laser level and the system components, claims 6-13 are indefinite and incomplete. In: line 5 of claim 6; and line 4 of claim 11 it is not clear how the upper case **rotatably supports** the rotating shaft, claims 6 and 11 are indefinite and incomplete. Since no disclosure exist to support the recitation in line 3 of claim 6, it is not clear within the context of claim language how the motor is **adapted** to drive the shaft more than 360 degrees in a single direction; claim 6 is indefinite and incomplete. Likewise in line 4 of claim 13 how is the motor **adapted** to drive the shaft so that the first and second laser diodes produce the level 360 degree reference plane; claim 13 is indefinite and incomplete.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action: A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. §103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) "A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 6 is, insofar as definite is rejected under 35 U.S.C. 102(b) as **anticipated** by or, in the alternative, under 35 U.S.C. 103(a) as being unpatentable over **Kirchever et al('120)** or over **Kirchever et al('948)**, both as applied in the previous rejection of claim 6 (see rejection dated 09/21/00).

Figs.1A,5 and 7 of Kirchever et al('120) or Kirchever et al('948) clearly discloses the center ray of the beam is perpendicular to the shaft. Further, although in the present case, the motors use is limited to drive the shaft in the direction of the scan angle of the laser mounted on the shaft, it is nonetheless clear that when the motor is on, it drivers or rotates the shaft and it is **inherent** that the motor can drive the shaft, in the devices of Kirchever et al('120) or Kirchever et al('948), **more than 360 degrees in a single direction**, if desired;. Surely applicant is not suggesting that one of ordinary skill would not inherently know how to use the motor disclosed to drive the shaft more than 360 degrees in a single direction. Further, it is pointed out and applicant is reminded that: "A reference is to be considered not only for what it expressly states, but for what it would reasonably have suggested to one of ordinary skill in the art."(emphasis added, see *In re DeLisle*, 56 CCPA 1319, 406 F.2d 1386,867 OG 722,160 USPQ 806.); clearly a **reasonable suggestion** here is that the motor can **inherently** be used to drive the shaft more than 360 degrees in a single direction, or it would have been obvious, when the motor is on and the shaft is oscillating or rotating, to use the motor to drive the shaft more than 360 degrees in a single direction, if desired.

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Further, as to Applicant's purported point of novelty, using fig. 1A, it is clear that the exit laser beam and a mechanical axis of the housing are perpendicular to the shaft(22). The motor coupled to the shaft in line 3 of claim 6 would be *inherent* in the device since the only shaft claimed is the main shaft which must be coupled to the motor if it(the main shaft) is to rotate. Likewise since the center ray of the laser beam and a mechanical axis of the module housing perpendicular to the rotating shaft .is met by the references in that clearly a mechanical axis of the housing, which is not limited by the language of the claims, can be virtually any axis including an axis perpendicular to the center ray of the beam and the rotating shaft... Applicant's device is obvious. Again it is pointed out to Applicant that the use("application") of the laser system of the prior art is not at issue , indeed the prior art laser system could be used in almost any apparatus and still be a reference against applicant's claims. Further it is pointed out that: (a) ..under section 103, not only are the teachings of the prior art taken into consideration, but also the level of ordinary skill in the pertinent art.(see In re Luck, 177 USPQ 523); and (b) ...it is well settled that the test of obviousness is not whether the features of one reference can be bodily incorporated into the structure of another, and proper inquiry should not be limited to the specific structure shown by the references, but should be into the concepts fairly contained therein, and the overriding question to be determined is whether those concepts would suggest to one skilled in the art the modifications called for by the claims.(see In re Van Beckum et al, 169 USPQ 47). When one considers these points of law along with a careful comparison and review of the art of record, it is clear that Applicant's device is obvious.

Applicant is not being sent copies of the references to: Kirchever et al('120) and Kirchever et al('948) as they were supplied in a previous Office action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leon Scott, Jr. whose telephone number is 703-308-4884. The examiner can normally be reached on Monday - Friday, 6:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dzierzynski can be reached on 703-308-4822. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7721 for regular communications and 703-308-2864 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.


Leon Scott, Jr.
Primary Examiner
Leon Scott, Jr.
Primary Examiner
Art Unit 2881

November 3, 2001